AUSTRALIA'S EQUITY HOME BIAS AND CORPORATE GOVERNANCE

Anil V Mishra[1]

School of Accounting, Economics and Finance
University of Southern Queensland
Australia

Abstract

This paper constructs the float adjusted measure of home bias and explores the determinants of Australia's equity home bias by employing International Monetary Fund's high quality dataset (2001 to 2005) on cross border equity investment. The paper finds that information asymmetries arising due to countries regulatory and legal environment have significant impact on Australia's equity home bias. Trade linkages are found to have a significant impact on Australia's equity home bias.

Australian investors exhibit a preference for English speaking and common legal origin countries. Transaction costs, though statistically significant, have a very low value to suggest a minor impact on Australia's home bias. This paper finds low diversification motives of Australian investors.

JEL Classifications: G11, G15, G30
Keywords: float; governance indicators; coordinated portfolio investment survey; rule of law.

[1] Corresponding author: Anil Mishra; School of Accounting, Economics and Finance, University of Southern Queensland, Australia; Tel. No: +61-04037 64431; E-mail address: mishra@usq.edu.au

AUSTRALIA'S EQUITY HOME BIAS AND CORPORATE GOVERNANCE

1 Introduction

The traditional international capital asset pricing model (ICAPM) based on Sharpe (1964) and Lintner (1965) predicts that investors should hold equities from countries around the globe in proportion to world market capitalisation. However, empirical facts suggest that international portfolios are heavily biased towards domestic assets (French and Poterba (1991), Cooper and Kaplanis (1994), Tesar and Werner (1995), Ahearne et al. (2004)). This phenomenon is termed as "home bias" and it can be defined as the situation where investors hold far too high a share of their wealth in domestic securities compared with the optimal share predicted by the traditional theory of portfolio choice. For instance, the actual domestic equity holding of Australia in 2002 was 81.67% whereas the ICAPM benchmark percentage was 1.84.

The empirical investigation into the home bias puzzle is important for several reasons. First, one of the major problems in the research on home bias has been relatively poor quality of data on cross border holdings. In the past, the cross border holdings were estimated using accumulated capital flows and valuation adjustments (Tesar and Werner (1995)). Warnock and Cleaver (2002) show that capital flows data are ill suited to estimate bilateral holdings. This paper contributes to the existing literature by employing the International Monetary Fund's (IMF's) Coordinated Portfolio Investment Survey (CPIS) dataset on bilateral equity holdings for the years 2001 to 2005. CPIS reports data on foreign portfolio asset holdings (divided into equity, long term debt, and short term debt) by residence of issuer. In 1997, IMF conducted the first CPIS wherein 29 countries participated; the next survey was conducted in 2001 wherein 69 countries participated and now CPIS is being conducted on an annual basis.

Second, there are several papers investigating the home bias puzzle related to individual countries viz. Japan (Kang and Stulz (1997)), Sweden (Dahlquist and Robertsson (2001)), Korea (Kim and Wei (2002)) and United States (Ahearne et al (2004), Dahlquist et al (2003)). Mishra and Daly (2006) and Mishra (2007) study Australia's cross border portfolio investment using CPIS data. There is no study that exclusively focuses on Australia's equity home bias. This is the first study that focuses exclusively on Australia's equity home bias.

Third, traditional studies on home bias assume that portfolio investors can hold world market portfolio. However, Dahlquist et al (2003) state that portfolio investors can only hold the float adjusted world market portfolio i.e. world portfolio of shares not held by insiders. This paper contributes to the existing literature on home bias, by constructing float adjusted measure of Australia's home bias for the years 2001 to 2005. Fourth, optimal insider ownership depends

on institutions that support corporate governance in a country as well as on the risks of predation by state. Home bias will tend to reduce in countries whose institutions support decentralized ownership. This paper contributes to the existing literature by examining the impact of host countries' legal and governance environment on Australia's home bias. Fifth, this paper also empirically investigates the role of direct barriers viz. transaction costs; information asymmetries arising due to culture (language, legal origin) and proximity (distance); and control variables viz. trade links, historical risk adjusted returns and covariance on Australia's equity home bias. Sixth, overall this paper fills in the gap by empirically investigating the phenomenon of home bias in the Australian context; which is critical to understanding international portfolio positions and capital flows.

This paper provides answers to the following questions: Which factors are important in explaining Australia's equity home bias? Are factors related to culture and proximity important in explaining Australia's equity home bias? Do trade linkages provide explanation for Australia's equity home bias? Do share trading costs associated with destination countries' stock exchanges affect Australia's equity home bias? Do destination countries' legal and governance environments influence Australia's equity home bias? Do investors' diversification motives primarily influence Australia's equity home bias?

This paper is structured as follows: Section 2 provides literature review of the home bias puzzle. Section 3 describes float adjusted measure of home bias. Section 4 describes the determinants of home bias and presents some stylized facts. Section 5 provides empirical specification. Section 6 describes the empirical results and finally, section 7 concludes.

2 Literature Review

Black (1974) and Stulz (1981) develop a two country capital market equilibrium model where there are barriers to cross border investment and these barriers can be considered as tax on net foreign investment. This tax represents various kinds of barriers to international investment such as direct controls on the import or export of capital, possibility of expropriation of foreign holdings, reserve requirements on bank deposits and other assets held by foreigners, restrictions on the fraction of business that is owned by foreigners. It may also include barriers due to information asymmetries i.e. unfamiliarity of residents of one country with the stock markets of other countries. Merton (1987) develops a model where investors hold stocks that they know. In this model, investors think that the risk of stocks they do not know is extremely high. Accordingly, the investors may overweight domestic stocks. Cooper and Lessard (1981) develop an international capital market equilibrium model which allows for differential taxes on foreign investment depending on the country of investment and the origin of investor. They

obtain unique solutions for taxes under extreme assumptions that taxes depend on the country of investment, or on the origin of investor. Cooper and Kaplanis (1994) find that hedging against inflation risk cannot explain the home bias.

Several papers consider the effect of indirect barriers i.e. information asymmetries on equity investment and home bias. French and Poterba (1991), for instance, find that information asymmetry can generate the same observed portfolio patterns as if investors expect the domestic returns to be several hundred basis points higher than the returns in foreign markets. Gehrig (1993) uses a noisy rational expectations model to investigate the effect of asymmetric information between domestic and foreign investors. Investors observe noisy signals with different degrees of precision. Domestic investors receive signals of future returns that are more precise. Investors remain incompletely informed, even in equilibrium. Domestic bias arises from better investor information about domestic stocks. Thus, on average foreign investments appear to be more risky. Hasan and Simaan (2000) derive the premium that an investor is willing to pay to buy the full information of the mean return vector and show that rational investors prefer home country dominated portfolios over diversified portfolios if the variability of estimation errors far exceeds the variability of the mean return vector. Coval and Moskowitz (1999, 2001) show that the weight of a US stock in US mutual funds is negatively related to the distance between the location of the fund and the location of the headquarters of the firm. The mutual fund managers do better with their holdings of stocks of firms located more closely to where the mutual fund is located. Portes et al (2001) find that information asymmetries are responsible for the strong negative relationship between asset trade and distance. They investigate the roles of explicit information variables, as well as distance, in explaining separately cross-border trade in corporate equities, corporate bonds, and government bonds. Portes and Rey (2005) explore a new panel data set on bilateral gross cross-border equity flows between 14 countries, for a period from 1989 to 1996. They show that gross transaction flows depend on market size in source and destination country as well as trading costs, in which both information and the transaction technology play a role. In their model, distance proxies some information costs, and other variables explicitly represent information transmission, an information asymmetry between domestic and foreign investors, and the efficiency of transactions. They find that the geography of information is the main determinant of the pattern of international transactions, while there is weak support for diversification motive, in their data, once they control for the information friction. Sarkissian and Schill (2004) find that geographic, economic, cultural, and industrial proximity play a dominant role in the selection of overseas listing stock exchange. Their findings imply that proximity constraints that lead to home bias in investment portfolio decisions are similar to those which influence financing decisions.

For Japan, Kang and Stulz (1997) find that foreign investors concentrate on equity investments in firms that are large; firms that export more and firms with good accounting performance. For Sweden, Dahlquist and Robertsson (2001) find that non-resident investors are mostly institutional investors and that the holdings of stocks by non-resident investors exhibit biases that are also typical of resident institutional investors. Their findings are consistent with Kang and Stulz (1997). For Finland, Grinblatt and Keloharju (2001) show that language matters in an investor's portfolio allocation. Finnish investors whose native language is Swedish are more likely to own stocks of companies in Finland that have annual reports in Swedish and whose CEOs speak Swedish than those investors whose native language is Finnish. For Korea, Choe et al (2001) find that foreign investors buy at higher prices than resident investors and sell at lower prices. Kim and Wei (2002) find that a significant information asymmetry exists between the resident foreign investors and non-resident foreign investors. They base their finding by testing the hypothesis that non-resident foreign investors may herd more than resident foreign investors like Korean subsidiaries and branches of foreign institutions as the latter have more timely information about the country they live in. Hau (2001) finds that proprietary trades on the German stock market do better when they are geographically closer to Frankfurt. For US, Ahearne et al. (2004) test the home bias puzzle by employing the data on US holdings of foreign equities. They find that information cost is a major determinant of a country's weight in US investor's portfolio. For Australia, Mishra and Daly (2006) state that the major determinants of Australia's geographical allocation of portfolio investment indicate a broad correspondence between stock market capitalisation of destination countries and the allocation of Australian financial investments but with some deviations from that baseline, where the deviations are correlated with Australian trade patterns. Mishra (2007) examines the bilateral, source and host factors driving portfolio equity investment across a set of countries using CPIS data on international equity holdings at the end of 1997, 2001 and 2002. He states that the bilateral equity investment is strongly correlated with the underlying patterns of trade in goods and services. The information asymmetries and cultural-institutional proximity are important for bilateral equity investment. The size of domestic stock market is the key correlate of aggregate foreign portfolio equity asset and liability holdings. The scale of aggregate foreign equity asset holdings is larger for richer countries.

Kho et al (2006) find that the home bias of US investors decreased the most towards countries in which the ownership by corporate insiders is low and countries in which ownership by corporate insiders fell. Using firm-level data for Korea, they find that portfolio equity investment by foreign investors in Korean firms is inversely related to insider ownership and that the firms that attract the most foreign portfolio equity investment are large firms with dispersed ownership. Dahlquist et al (2003) show that home bias is closely linked to corporate

governance. They show that US investors underweight those foreign countries in their portfolios which have closely held firms. They construct an estimate of the world float portfolio. They also analyse Swedish firm level data on foreign ownership and closely held shares and show that the weight of a Swedish firm in the portfolio of foreign investors is inversely related to the fraction of firm held by controlling share holders.

3. Float adjusted Home Bias

Suppose the source country is i and the host country is j. Share of $i's$ equity in country j $\left(I_i^j\right)$ is the ratio of $i's$ holdings of country j equities to country $i's$ total equity portfolio.

$$I_i^j = \frac{\text{Country } i's \text{ holdings of country } j \text{ equities}}{\text{Country } i's \text{ total equity portfolio}} \quad (1)$$

Country $i's$ total equity portfolio = Investment by country $i's$ residents in home equities + Investment by country $i's$ residents in foreign equities. (2)

In this paper, country i is the source country, Australia. In other words, Australia's total equity portfolio is investment by resident Australians in home equities plus investment by Australians in foreign countries.

Investment by country $i's$ residents in home equities = Country $i's$ market capitalisation - Country $i's$ equities held by foreign investors. (3)

In other words, investment by resident Australians in home equities = Australia's market capitalisation - Australia's equities held by other countries. The market capitalisation value is determined from Federation Internationale des Bourses de Valeurs (FIBV) database of World Stock Exchanges. The equity data is from IMF's CPIS dataset on cross border portfolio equity investment for the years 2001 to 2005. Appendix A lists those countries whose cross border equity investment (CPIS data) in Australia and Australia's equity investment abroad, is available over the years 2001 to 2005.

Sharpe (1964) and Lintner (1965) models are based on perfect markets. Their models assume that investment and consumption opportunity sets do not differ across countries and that investors are the same across countries with respect to risk aversion and information. There are no barriers to international investment, no restrictions on short sales, no taxes, no information asymmetries and no tariffs. The traditional ICAPM model suggests that to maximize risk

adjusted returns, investors should hold equities from countries around the world in proportion to their market capitalisation.

It follows that share of country $i's$ equities invested in country j $\left(I_j^*\right)$, is the ratio of market capitalisation of country j in the world market capitalisation.

$$I_j^* = \frac{MC_j}{MC_{world}} \tag{4}$$

where MC_j is the market capitalisation of country j and MC_{world} is the world market capitalisation. This ratio is the benchmark of portfolio holdings to which the actual portfolio share is compared.

Ahearne et al (2004) employ the traditional approach to measure home bias in United States. The equity home bias is the deviation from the ICAPM benchmark, defined as one minus the ratio of foreign equities in the US and world portfolios.

$$HomeBias_{ij} = 1 - \frac{I_i^j}{I_j^*} \tag{5}$$

The traditional theory of home bias calculates the world market portfolio assuming that all shares issued by a corporation could potentially be held by foreign investors. Dahlquist et al (2003) state that in countries with poor investor protection, firms tend to controlled by large share holders so that foreigners can hold only a small portion of issued shares that are freely traded or floated. Firms outside the United States are typically controlled by large resident shareholders (La Porta et al (1999)). These large resident share holders are the controlling share holders, who only sell their shares as a control bloc for a price significantly above the open market share trade prices. Shares held by the controlling share holders are also known as closely held shares. The controlling share holder would not sell his shares without being paid a premium to reflect the benefits he derives from control. The controlling share holders may be officers, directors, and their immediate families, shares held in trusts, shares held by pension benefit plans, and shares held by individuals who hold 5% or more of the outstanding shares. The Japanese closely held shares represent the holdings of the ten largest shareholders.

Suppose the controlling share holders insider ownership is α. Portfolio investors can only hold shares in a firm, not held by the controlling shareholders. Portfolio investors (or non-

insiders) can hold $(1-\alpha)$ of the firm. Foreign investors can only hold a fraction a of the share held by non-insiders. Foreign investors hold $a(1-\alpha)$ of the firm if they have no home bias. Dahlquist et al (2003) state that portfolio investors cannot hold the world market portfolio, but can only hold the world market portfolio of shares not held by insiders; which is also known as the float adjusted world market portfolio. If all investors hold the float adjusted world market portfolio, then as insider holdings fall, foreign investors can buy a fraction of shares sold by insiders equal to the weight of the country in the float adjusted world market portfolio. But if foreign investors do not hold the float adjusted world market portfolio, then there is no necessary relation between a change in insider ownership and a change in shares held by foreign investors because all the shares sold by insiders could be bought by local investors.

This paper calculates the float adjusted portfolio for countries and also float adjusted world market portfolio from DataStream's Worldscope database. The float adjusted market capitalisation for a country is the sum of the values of free float market capitalisation for all the firms in that country. Free float market capitalisation is free float number of shares multiplied by the latest available share price, in millions of currency units. Free float number of shares is the percentage of total shares in issue available to ordinary investors i.e. the total number of shares less the closely held shares. Appendix B provides annual data on the number of firms with free float market value.

$$MVFF_j = \sum_m MVFF_{jm} \tag{6}$$

where $MVFF_j$ is the float adjusted market capitalization for country j, $MVFF_{jm}$ is the free float market capitalization of firm m in country j and $\sum_m MVFF_{jm}$ is the sum of free float market capitalisation of all firms in country j.

$$MVFF_{world} = \sum_j MVFF_j \tag{7}$$

where $\sum_j MVFF_j$ is the sum of free float market capitalisation for the countries in the world. Appendix B lists the countries whose free float market capitalisation data is used for calculating the world float adjusted market capitalisation.

Upon incorporating free float measures, equation (4) becomes

$$I^{*}_{FF,j} = \frac{MVFF_{j}}{MVFF_{world}} \tag{8}$$

Finally, the free float home bias measure is

$$HomeBias_{FF,ij} = 1 - \frac{I^{j}_{FF,i}}{I^{*}_{FF,j}} \tag{9}$$

where $HomeBias_{FF,ij}$ is the float adjusted measure of home bias, $I^{j}_{FF,i}$ is the float adjusted measure of country $i's$ equity holdings in country j and $I^{*}_{FF,j}$ is float adjusted world market portfolio of country j.

Home bias is equivalent to normalizing source country holdings in host country by the country's float market capitalisation and then dividing by the share of host country holdings in the worldwide float market capitalisation. The empirical analysis in this paper employs the float adjusted home bias measure for the years 2001 to 2005.

[INSERT TABLE 1]

Table 1 presents Australia's float adjusted home bias measure as of December 2004. Column (1) of the table presents Australian investors' actual portfolio share as of December 2004. The actual portfolio share is the foreign equity holdings of Australia in other countries relative to Australia's total holdings of foreign and domestic equities. Column (1) indicates that Australia's actual percent portfolio share is the highest in US (11.07) followed by UK (1.74), Japan (1.66), Netherlands (1.22) and then, the remaining countries of the world. Column (2) of the table presents the theoretical portfolio share i.e. shares of country's float market capitalization in the world float market capitalization. It shows the shares of Australia's equity holdings by country under the assumption that investors choose portfolios based on the standard portfolio theory. Column (3) compares the actual share of domestic equities held by Australians in other countries with the benchmark share in the world portfolio as per ICAPM model. This comparison gives an indication of the degree to which Australian investors' underweight different foreign countries. Column (3) clearly indicates that there is a significant amount of variation in values across countries and Australian holdings are less than those predicted by ICAPM. The ratio is 0.66 for Netherlands indicating that Australian investors holding of stocks from Netherlands at end-2004 was 66 percent of what traditional portfolio theory would have predicted. The degree of underweighting is more severe against countries like Czech Republic (0.03) where Australian investors hold 3 percent of the shares predicted by traditional ICAPM levels. Column (4) indicates the measure of home bias as per equation

(9). A greater value of home bias measure corresponds to a lower weight in Australia relative to world portfolios and thus, a higher degree of bias.

4. Determinants of Home Bias and some stylized facts

Some of the possible sources of home bias in the Australian investors equity holdings may be due to explicit costs, proximity costs, regulatory and corporate governance information costs, trade and diversification motives. These sources of home bias are discussed below:

4.1 Explicit Costs

Black (1974), Stulz (1981), Cooper and Kaplanis (1986), Aherane et al (2004) state that investors face explicit costs related to equity investment viz. transaction fees, taxes, commissions and the costs of gathering information.

(i) Transaction Costs $\left(TransactionCost_j\right)$

Home bias can arise due to high transaction costs associated with trading foreign equities. The transaction cost data is derived from Elkins-McSherry Co. (www.elkins-mcsherry.com). Elkins-McSherry Co. receives trade data on all global trades by institutional traders and computes measures of trading costs. The data consists of average trading costs as a percentage of trade value for active managers in a universe of 42 countries. The data are quarterly, from the last quarter of 1995 through the fourth quarter of 2006. In 1998, the institutional traders in the data represented 136 firms, of which 105 were pension funds, 27 were investment managers, and 4 were brokers. These institutions accounted for 28 billion shares in 632,547 trades, using 700 global managers and 1000 brokers (Domowitz et al 2001).

The transaction cost comprises of three cost components viz. commissions, fees and market impact costs. This paper takes into account the total cost comprising of all the three cost components for the end quarter of years 2001 to 2005. Investors would underweight high transaction cost countries in their portfolios and accordingly, this variable is expected to have positive impact on the measure of home bias.

4.2 Proximity Costs

Mishra (2007), Mishra and Daly (2006), Sarkissian and Schill (2004), Aviat and Coeurdacier (2004), Coval and Moskowitz (1999, 2001), Portes et al (2001), Grinblatt and Keloharju (2001) and Portes and Rey (2005) find that distance and language play a dominant role in

investors preference for equity investment. The following section discusses two proximity measures of home bias: distance and language.

(i) Distance $\left(Dist_{ij}\right)$

Geographical distance is a barrier to interaction among economic agents and cultural exchange. Investors prefer investing in countries which are in geographic proximity due to lower information costs arising from cultural similarities and familiarity. The paper employs logarithm of distance value obtained from Indo.com[2] site. Indo.com uses data from US census and a supplementary list of cities around the world to find latitude and longitude of two places and then calculates distance between them (as the crow flies). This variable is expected to have a positive impact on the measure of home bias.

(ii) Language $\left(Language_{ij}\right)$

$Language_{ij}$ is the common language dummy variable which is equal to one if source and host country share a common language; otherwise its value is zero. Investors prefer to invest in foreign countries that share a common language with their home country. Common language may better enable investors to read company financial reports and financial press analysis. This may enhance investors' familiarity with destination countries' financial system and thus reduce investors' information costs. Data on language is from the World Factbook 2006[3] which reports the official, major and unofficial languages from all over the world. Countries such as Australia, New Zealand, UK and US share English as a common language; while Italy, Japan, Malaysia, South Korea and Indonesia have their own languages. This variable is expected to have a negative impact on the measure of home bias.

4.3 Regulatory and Corporate Governance Information Costs

The cross country differences in accounting practices, disclosure requirements and regulatory environments give rise to information asymmetries between local and foreign investors. This paper investigates the impact of host countries' regulatory environments and corporate governance standards on Australia's home bias. These legal and governance indices are

[2] http://www.indo.com/distance/
[3] http://www.cia.gov/cia/publications/factbook/

expected to have a negative impact on Australia's home bias. A brief description of these legal and governance indices is provided below:

4.3.1 La Porta et al (1998) legal indicators

This paper considers legal origin dummy, efficiency of judicial system indices and rule of law indices from La Porta et al (1998) to investigate their impact on home bias.

(i) Legal Origin (LO)

Common origin to the legal system uses a dummy variable for similarity in institutions. This paper assigns a dummy value of 1 if the source and host country have the same legal origin otherwise it is zero. Laws in different countries are typically not written from scratch, but rather transplanted from a few legal families or traditions. In general, commercial laws come from two broad traditions: common law, which is English in origin and civil law, which derives from Roman law. The modern commercial laws originate from the three major families French, German and Scandinavian, in the civil law tradition. The three major law tradition families that have global impact are English common law and the French and German civil law. In case of individual countries, the resulting laws reflect both the influence of their families and country specific law characteristics. This variable is expected to have a positive impact on foreign equity holdings.

(ii) Efficiency of judicial system (EFF)

The efficiency of judicial system index is developed by the country risk rating agency Business International Corporation. This index assesses the efficiency and integrity of the legal environment as it affects business, particularly foreign firms. It may be taken to represent investors' assessments of conditions in the country in question. This index scales from 0 to 10, with lower scores for lower efficiency levels and is averaged over the period from 1980 to 1983. In this paper, the efficiency of judicial system index has the lowest value (3.25) for Thailand and the highest value (10) for US, UK, Japan, Sweden, Switzerland, Singapore, Finland, Netherlands, New Zealand and Norway. This variable is expected to have a negative impact on Australia's equity home bias.

(iii) Rule of law (ROL)

Rule of law index is developed by the country risk rating agency International Country Risk (ICR) and it assesses the law and order tradition in the country. This index scales from 0 to 10,

with lower scores for less tradition for law and order and is average of the months of April and October of the monthly index between 1982 and 1995. In this paper, the rule of law index has the lowest value (4.2) for South Africa and the highest value (10) for US, UK, Japan, Sweden, Switzerland, Singapore, Denmark, Canada, Belgium, Austria, Finland, Netherlands, New Zealand and Norway. This variable is expected to have a negative impact on Australia's equity home bias.

4.3.2 Kaufmann et al (2006) governance indicators

Kaufmann et al (2006) indicators describe various aspects of the governance structures of a broad cross-section of countries. The indicators have been constructed on the basis of information gathered through a wide variety of cross-country surveys as well as polls of experts. The indicators cover 213 countries and territories for 1996, 1998 and 2000, and annually for 2002 to 2005. In 2005, they estimate the indicators on 276 individual variables measuring different dimension of governance, by employing 31 different datasets from 24 different sources. They construct six indicators each representing a different dimension of governance viz. voice and accountability, political instability, government effectiveness, regulatory burden, rule of law and graft. The variables are standardized to have a mean of zero and a standard deviation of one. The larger the values, the better they indicate their institutional quality.

Voice and accountability $(VACC)$ index focuses on various indicators related to political process, civil rights, and institutions that facilitate citizen control of government actions, such as media independence. Political stability and lack of violence (PS) index combines indicators that measure the risk of a destabilization or removal from power of the government in a violent or unconstitutional way.

Government Effectiveness (GE) index comprises of indicators that measure the quality of bureaucracy, the competence of civil servants, the quality of public service provision and the credibility of the government's commitment to its policies. Regulatory Quality (RQ) index consists of indicators related to the regulations of exports, imports, business ownerships, equities ownerships, banking, foreign investment, price controls, tariffs, unfair competitive practices etc.

Rule of Law (RL) index measures concepts related to enforceability of government and private contracts, fairness of judicial process, speediness of judicial process, violent and

organised crimes, trust in legal system, patent and copyright protection etc. Control of Corruption (CC) index focuses on the measure of corruption within the political system, the rate of severity of corruption within the state, the intrusiveness of the country's bureaucracy, corruption among public officials etc. Average (AVE) is the average of the Kaufmann et al (2006) governance indicators. Average takes into account the effect of various governance dimensions that determine simultaneously the location of portfolio equity investment.

4.4 Trade and Diversification

Mishra (2007) and Lane and Milesi Feretti (2004) state that bilateral equity investment is strongly correlated with the underlying patterns of trade in goods and services. This paper examines the impact of trade on Australian investors' equity home bias.

Bohn and Tesar (1996) state that investors are momentum traders or return chasers, who base their equity investment decisions on the stock markets past performance. They state that investors tend to move into markets where returns are expected to be high and retreat from markets when predicted returns are low. This paper examines the investors diversification motives on Australia's equity home bias.

4.4.1 Trade $(Trade_{ij})$

Trade is the average of imports and exports normalised by the destination country's GDP. This measure is in accordance with Aherane et al (2004). Australian investors are better informed about those foreign firms, with which Australia has trading relations. Australian investors are better able to attain accounting and regulatory information on foreign markets through trade. Consequently, investors may be inclined to hold the stocks of foreign companies with whose products they are most familiar. This variable is expected to have a negative impact on the measure of home bias. The data on imports and exports is taken from IMF's Direction of Trade Statistics and GDP data is from World Bank's World Development Indicators.

4.4.2 Diversification Motives

This paper employs two measures i.e. covariance and reward to risk ratio to investigate the diversification motives of Australian investors.

(i) Covariance (COV_{ij})

The financial economics literature suggests that the greater the comovements between financial assets of two countries, the lower the benefit of diversification. When the correlation between source country and host country is small, source country investors enjoy a larger diversification gain from investing in host country; they have greater desire to increase their equity holdings in host country. Therefore the degree of home bias of source country for host country will be smaller. The covariance between source and host country is computed using return data from DataStream's Morgan Stanley Capital International (MSCI). The return data is calculated from MSCI monthly stock market indices for months ranging from January 1995 to December 2005.

(ii) Reward to risk ratio $\left(RR_j\right)$

Reward to risk ratio is the ratio of mean monthly return to standard deviation. This measure is in accordance with Ahearne et al (2004). Investors might tend to underweight those countries in their portfolios, whose stock markets have performed poorly, based on their information of past stock returns. This variable is expected to have negative impact on the measure of home bias. The return data is calculated from Datastream's Morgan Stanley Capital International (MSCI) monthly stock market indices for months ranging from January 1995 to December 2005.

5. Empirical Specification

This paper is based on Cooper and Kaplanis (1986) theoretical framework. They derive efficient portfolios in a world where there are barriers to cross border investment, which depend both on the domicile of the investor and his country of investment. This paper regresses the measure of home bias (discussed in section 3) on a vector of explanatory variables that includes explicit costs, proximity costs, regulatory and corporate governance information costs, trade and diversification motives (discussed in section 4).

$$HomeBias_{FFij} = \alpha_0 + \alpha_1\left(CapitalControl_j\right) + \alpha_2\left(TransactionCost_j\right) + \alpha_3\left(Dis_{ij}\right) + \alpha_4\left(Language_{ij}\right) + \alpha_5\left(Trade_{ij}\right) + \alpha_6\left(RR_j\right) + \alpha_7\left(COV_{ij}\right) + \chi_j \quad (10)$$

where $HomeBias_{FFij}$: Float adjusted measure of home bias, $CapitalControl_j$: Capital control measure of destination country, $TransactionCost_j$: Transaction cost associated with share trading in destination country, Dis_{ij}: Distance in kilometre between capital city of source and host country, $Language_{ij}$: Common language dummy with value equal to one if source and host country have same language otherwise the value is zero, $Trade_{ij}$: Trade is the

average of imports and exports normalised by the destination country's GDP, RR_j : Reward to risk is the ratio of destination country's mean monthly return to standard deviation, COV_{ij} : Covariance of monthly returns of source and host country, χ_j : random error term.

$$HomeBias_{FFij} = \beta_0 + \beta_1(EFF) + \beta_2(ROL) + \beta_3(LO) + \varepsilon_j \quad (11)$$

where EFF : Efficiency of judicial system, ROL : Rule of law, LO : Legal origin dummy with value equal to 1 if source and host country have the same legal origin otherwise it is 0, ε_j : random error term. EFF , ROL and LO indices are from La Porta et al (1998).

$$HomeBias_{FFij} = \gamma_0 + \gamma_1(Trade_{ij}) + \gamma_2(VACC) + \gamma_3(PS) + \gamma_4(GE) + \gamma_5(RQ) + \gamma_6(RL) + \gamma_7(CC) + \gamma_8(AVE) + \omega_j \quad (12)$$

where $Trade_{ij}$: Trade is the average of imports and exports normalised by the destination country's GDP, $VACC$: Voice and Accountability, PS : Political Stability and Lack of Violence, GE : Government Effectiveness, RQ : Regulatory Quality, RL : Rule of Law, CC : Control of Corruption, AVE : Average, ω_j : random error terms.

6. Empirical Results

The empirical results are based on panel regression of equations (10) to (12), for the years 2001 to 2005. Appendix A gives the list of host countries for the years 2001 to 2005. Only those countries are included for which cross border equity investment in Australia and Australia's equity investment abroad are available from CPIS.

[TABLE 2]

Table 2 presents the correlation matrix for the variables used in the paper. The measure of home bias is negatively related to trade, language dummy and reward to risk ratio; and positively related to distance, transaction cost and covariance. Overall, the correlation matrix does not indicate serious correlation among the variables.

[TABLE 3]

Table 3 indicates the panel regression results of Australia's home bias measure by regressing home bias variable against the independent variables i.e. trade, distance, language and transaction cost. In column (1), trade variable enters significantly at the 10 percent level with a negative sign, implying that Australian investors prefer investing in countries with which Australia has trade relationships. Countries that trade with each other tend to learn more about one other's culture, legal and financial environment, and current accounting practices etc. This

facilitates portfolio equity investment among the countries and consequently reduces equity home bias. The transaction cost variable is positive and significant at 1 percent level. However, the value of transaction cost variable is very low (0.00) which implies that it does not have a major influence on Australia's equity investment.

Column (2) indicates regression results where the independent variables are trade, language and transaction cost. Language variable is significant at 1 percent level and is negative. This implies that Australian investors prefer investing in English speaking countries. Speaking a common language English, enables Australian investors to better understand the financial system and regulatory environment of the host countries thus facilitating their investments. In 2004; Australia's equity investment in English speaking countries was around 69 % of its total crosses border equity investment (author's own calculations based on IMF's CPIS dataset for 2004). The trade variable is still negative but losses significance from 5 percent to 10 percent. This suggests that some of the contribution from trade may reflect lower information costs which are also captured through common language. The transaction cost variable is still positive and significant at 1 percent level. However, the value of transaction cost variable is very low (0.00) which implies that it does not have a major impact on Australian investors' equity home bias.

Column (3) indicates the impact of distance and transaction cost on home bias. Distance variable is positive and significant at 10 percent. Investors prefer investing in countries which are in geographic proximity due to low information costs. The major equity investment destinations of Australia are United States and United Kingdom, which are located at greater distances as compared to some Asian countries. Mishra and Daly (2006) state that Asian financial markets are not well developed. Australian investors prefer United States and United Kingdom because these countries are among the world's largest economies with major shares of the world's share and bond markets. The transaction cost variable is positive and significant at 1 percent level; however it's very low value (0.00) further confirms that it does not have a major influence on Australia's equity investment.

[TABLE 4]

Table 4 indicates the regression results for diversification motives of Australian investors. Column (1) includes trade, transaction cost and covariance as the independent variables. Covariance variable is used to test the diversification motive. If transactions occur because of diversification motive, the covariance variable should be significant because greater the comovements between financial assets of two countries, the lower the benefit of diversification. Covariance is positive but insignificant. This indicates low diversification

motives of investors. Trade variable enters with a negative sign and is significant at 5 percent. Transaction cost variable is positive and significant at 5 percent.

Column (2) includes trade, transaction cost and reward to risk ratio as the independent variables. Reward to risk ratio is employed instead of covariance, as a robustness check to investigate the diversification motive. If portfolio decisions were based on past returns, then Australian investors might tend to underweight countries' whose stock markets have performed poorly. The reward to risk ratio variable is negative and significant at 5 percent. This indicates return chasing behaviour of Australian investors. This is in accordance to the finding of Brennan and Cao (1997) who state that when domestic investors of country j have cumulative information advantage in the domestic market, the trade of foreign investors in market j is positively related to the return of country j. This happens because foreign investors revise the means of their predictive distributions according to the realized public signals by more than the better informed domestic investors do. Again, trade and transaction cost variables are significant and maintain their sign as per column (1).

Column (3) includes trade, language, transaction cost and covariance as the independent variables. Covariance is positive and insignificant which implies low diversification motive of Australian investors. Language is negative and significant at 5 percent. Trade is negative but losses significance from 5 percent to 10 percent. This further reinforces that some of the contribution from trade may reflect lower information costs which are also captured through common language. Transaction cost variable is positive and significant; however its value is very low (0.00). This further provides support that transaction cost has low impact on Australia's equity home bias.

As a robustness check, column (4) replaces covariance variable of column (3) with reward to risk ratio variable; other independent variables i.e. trade, language and transaction cost are similar to those in column (3). The reward to risk ratio variable is negative and significant at 10 percent. This suggests return chasing behaviour of Australian investors. Trade, language and transaction cost variables have similar sign and significance as those in column (3).

Overall results of table 4 confirm Australia's equity investment in English speaking destination countries and also Australian investors not driven primarily by diversification motives. The results are in accordance with Sarkissian and Schill (2004) and Aviat and Couerdacier (2004).

[TABLE 5]

Table 5 illustrates the impact of La Porta et al (1998) indices i.e. rule of law, efficiency of judicial system and legal origin dummy on home bias in the Australian context. Column (1) examines the effect of rule of law index on home bias. Rule of law variable is negative and significant. This implies that Australian investors less underweight countries with high tradition of law and order in their portfolios. Column (2) investigates the impact of efficiency of judicial system on home bias. Efficiency of judicial system variable is negative and significant. This suggests that Australian investors weight those countries in their portfolios which have efficient judicial system. Finally, column (3) examines the effect of legal origin dummy variable on home bias. Legal origin dummy variable is negative and significant. This suggests that Australian investors weight countries having similar culture and origin in their portfolios. Investors are better able to better understand the legal and regulatory environment of the countries having same legal origin as their own and accordingly prefer to invest in those countries.

[TABLE 6]

Table 6 presents the regression results that indicate the impact of World Bank governance indicators on home bias, with trade as the control variable. In table 6, trade variable enters significantly with a negative sign, confirming that Australian investors prefer investing in countries with which Australia has trade relationships. Column (1) indicates that voice and accountability variable is negative and significant at 1 percent level. This implies that civil liberties and degree of democratic accountability have significant impact on Australian investors cross border equity investment. Column (2) indicates that political stability indicator is negative and significant at 10 percent level. This implies that perceptions about destabilization of a government due to political instability and violence play a role on Australian investors cross border equity investment. Column (3) indicates that government effectiveness indicator is negative and significant. This implies that Australian investors weight those countries in their portfolios which have quality of civil service, public service, policy formulation and implementation and credibility of government's commitment to such policies. Column (4) indicates that regulatory quality indicator is negative and significant. This implies that Australian investors weight those countries in their portfolios whose governments are able to formulate and implement sound policies and regulations that permit and promote private sector development. The rule of law indicator in column (5) is negative and significant. This implies that Australian investors weight those countries in their portfolios which have high quality of contract enforcement, police and courts; and fairness of judicial process. In column (6), the control of corruption indicator is negative and significant. This implies that Australian investors weight those countries in their portfolios which have regulatory framework to check and control corruption. Columns (1) to (6) illustrate the individual effects of various institutional variables. However, if various institutional dimensions determine simultaneously

the location of portfolio equity investment, then by including them individually might lead to an omitted variable bias. Therefore, column (7) indicates the effect of governance indicators grouped together (average) on home bias. The average of governance indicators variable is negative and significant. This implies that Australian investors weight those countries in their portfolios which have proper corporate governance system in place.

Overall, results of Table 5 and Table 6 suggest that better governance in the destination countries would lead to an increase of Australian investors' equity investment. Investors weight countries in their portfolios which have efficient governing systems, high tradition of law and order, transparent corporate governance, effective policies related to trade and development, and regulatory system for control of corruption.

7. Conclusion

This paper employs IMF's high quality CPIS dataset on cross border equity investment to investigate the determinants of equity home bias in the Australian context. The data itself indicates some interesting stylized facts about the home bias puzzle.

The traditional studies on home bias assume that investors can hold world market portfolio. However, in a world with controlling share holders; portfolio investors can only hold the world portfolio of shares that are not available to controlling shareholders (world float portfolio). This paper constructs the float measure of home bias for the years 2001 to 2005 and explores the determinants of Australia's equity home bias.

Trade links are found to have a negative and significant impact on home bias; implying that trade alleviates certain information asymmetries in terms of familiarity with the financial and legal environment of the countries; cultural barriers etc. Information flows positively affect both cross-border finance and trade. Trade in goods and trade in assets become complementary: firm managers learn about each other by trading goods and/or securities. Trading in goods market reduces informational asymmetries in the financial markets (and vice versa).

This paper finds that Australian investors exhibit a preference for common language (English speaking) and common legal origin countries. Investors acquire useful information about familiar firms from reading company statements in a language they understand, from general or acquired knowledge about local fims, or from the cultural groups they socialize within. The information based theory of the influence of language, culture and legal origin leads to more active trading of these familiar firms and generates superior performance in these firms.

This paper finds low diversification motives of Australian investors. Transaction costs are positive and statistically significant; however their values are very low.

This paper also investigates the impact of destination countries legal and governance environment on Australia's home bias. Investors weight countries in their portfolios which have efficient governing systems, high tradition of law and order, transparent corporate governance and effective policies related to trade and development.

Overall the results indicate that both regulations and information costs have impact on Australia's cross border equity holdings. Even among countries for which regulatory barriers to foreign equity holdings are small, cultural barriers seem to constitute quite significant barrier to equity holdings.

The main purpose of this paper is to analyse causes for the home bias in the Australian context and to derive implications from these findings for economic policy. This paper finds that even if policy induced barriers to equity flows have been lifted, there remain substantial economic or market inherent barriers. These barriers tend to remain relevant and to affect the way in which financial systems operate and integrate even if economic policy has reduced regulatory barriers to entry. The asymmetries in information between domestic and foreign investors, which can arise from differences in regulatory environments, are of primary importance. The market inherent barriers due to fixed costs of market entry including transaction costs do not have a major impact in the Australian context.

References

Ahearne, Alan G., Griever, William L. and Warnock, Francis E., 2004, Information costs and home bias: an analysis of US holdings of foreign equities, Journal of International Economics, 62: 313-336.

Aviat, A. and N. Coeurdacier. 2004, The Geography of Trade in Goods and Asset Holdings, DELTA. Mimeo.

Black, F., 1974, International capital market equilibrium with investment barriers, Journal of Financial Economics, 1.

Bohn, H., Tesar, L., 1996, US equity investment in foreign markets: Portfolio rebalancing or return chasing, American Economic Review, 86(2): 77-81.

Brennan, M. and H. Cao. 1997. International Portfolio Investment Flows. *Journal of Finance* 52(2): 1851-80.

Choe, H., B. Kho and R.M. Stulz, 2001, Do domestic investors have more valuable information about individual stocks than foreign investors?, NBER Working Paper 8073. NBER, Cambridge, MA.

Cooper, I.A. and D.R. Lessard, 1981, International Capital Market Equilibrium with Deadweight Costs to Foreign Investment, Unpublished Paper.

Cooper, I. and E. Kaplanis, 1986, Costs to crossborder investment and international equity market equilibrium in J. Edwards, J. Franks, C. Mayer and S. Schaefer (eds.), Recent Developments in Corporate Finance, Cambridge University Press, Cambridge.

Cooper, I. and E. Kaplanis, 1994, What explains the home bias in portfolio investment?, Review of Financial Studies, 7: 45-60.

Coval, J., and T. Moskowitz, 1999, Home Bias at Home: Local Equity Preference in Domestic Portfolios, Journal of Finance, 54, 2045-2073.

Coval, J., and T. Moskowitz, 2001, The Geography of Investment: Informed Trading and Asset Prices, Journal of Political Economy, 109, 811-841.

Dahlquist, M., and G. Robertsson, 2001, Direct foreign ownership, institutional investors, and firm characteristics, Journal of Financial Economics, 59: 413-440.

Dahlquist, M., L. Pinkowitz, R. Stulz, and R. Williamson, 2003, Corporate Governance and Home Bias, Journal of Financial and Quantitative Analysis, 38(1): 135-157.

Domowitz, I.., J. Glen, A. Madhaven, 2001, Liquidity, volatility, and equity trading costs across countries and over time, International Finance, 4(2), 221-255.

French, K., and J. Poterba, 1991, Investor diversification and international equity markets, American Economic Review, Papers and Proceedings, 222-226.

Gehrig, Thomas, 1993, An Information Based Explanation of the Domestic Bias in International Equity Investment, Scandinavian Journal of Economics, 95(1): 97-109.

Grinblatt, M. and Keloharju, M., 2001, How distance, language and culture influence stockholdings and trades, Journal of Finance, 56: 1053-1073.

Hasan, Ifekhar and Yusif, Simaan, 2000, A Rational Explanation for home country bias, Journal of International Money and Finance, 19: 331-361.

Hau, H., 2001, Location matters, Journal of Finance, 56:1959-1983.

International Monetary Fund, 2006, Direction of Trade Statistics, IMF Washington, DC.

International Monetary Fund, 2006, Portfolio Investment: Coordinated Portfolio Investment Survey (CPIS): Metadata, IMF, Washington, DC.

International Monetary Fund, 2006, Annual Report on Exchange Arrangements and Exchange Restrictions, IMF Washington, DC.

Kang, Jun-Koo and Stulz, R., 1997, Why is There Home Bias? An Analysis of Foreign Equity Ownership in Japan, Journal of Financial Economics, 46(1): 3-28.

Kaufmann, D., A. Kraay, and P. Zoido-Lobaton, 2006, Governance Matters V: Governance Indicators for 1996-2005, World Bank Policy Research Working Paper Series No. 4012.

Kho, B.C., R.M Stulz and F.E Warnock, 2006, Financial Globalization, Governance and the Evolution of the Home Bias, NBER Working Paper 12389.

Kim, Woochan and Wei, Shang-Jin, 2002, Foreign Portfolio Investors Before and During a Crisis, Journal of International Economics, 56: 77-96.

La Porta, R., F. Lopez-de-Silanes, and A. Sheifer, 1999, Corporate ownership around the world, Journal of Finance, 54: 471-517.

La Porta, R., F. Lopez-de-Silanes, A. Sheifer, and R. Vishny, 1998, Law and Finance. Journal of Political Economy, 106: 1113-1155.

Lane, P.R. and G.M. Milesi-Ferreti, 2004, International Investment Patterns, IISC Discussion Paper No. 24.

Lintner, J., 1965, The valuation of risky assets and the selection of risky investment in stock portfolio and capital budgets, Review of Economics and Statistics, 47:103-124.

Merton, R., 1987, A simple model of capital market equilibrium with incomplete information, Journal of Finance, 42: 483-510.

Mishra, A.V., 2007, International Investment Patterns: Evidence Using A New Dataset, Research In International Business And Finance, 21(2): 342-360.

Mishra, A. and K., Daly, 2006, Where Do Australians Invest?, Australian Economic Review, 39(1): 47-59.

Portes, R. and H. Rey, 2005, The Determinants of Cross-Border Equity Flows, Journal of International Economics, 65(2) (March), 269-296.

Portes, R., H. Rey and Y. Oh., 2001, Information and Capital Flows: The Determinants of Transactions in Financial Assets, European Economic Review, 45 (May): 783-96.

Sarkissian, S. and M.J., Schill, 2004, The Overseas Listing Decision: New Evidence of Proximity Preference, The Review of Financial Studies, 17 (3): 769-809.

Sharpe, W., 1964, Capital asset prices: A theory of market equilibrium under the condition of risk, Journal of Finance, 19: 425-442.

Stulz, R., 1981, On the effects of barriers to international investment, *Journal of Finance*, 36: 923-934.

Tesar, L., and Werner, 1995, Home bias and high turnover, Journal of International Money and Finance, 14: 467-493.

Warnock, F. and C. Cleaver, 2002, Financial centers and the geography of capital flows, International Finance, 6(1): 27-59.

World Bank, 2005, World Development Indicators, World Bank, Washington, DC.

Appendix A: Countries

2001	2002	2003	2004	2005
Hong Kong	Austria	Austria	Austria	Austria
Denmark	Denmark	Brazil	Hong Kong	Hong Kong
Finland	Finland	Hong Kong	Czech Republic	Czech Republic
France	France	Denmark	Denmark	Finland
Germany	Germany	Finland	Finland	Germany
Greece	Greece	France	Germany	Japan
Hungary	Ireland	Germany	Japan	South Korea
Ireland	Italy	Greece	South Korea	Malaysia
Italy	Japan	Hungary	Malaysia	Netherlands
Japan	Malaysia	Ireland	Netherlands	Norway
South Korea	South Africa	Italy	New Zealand	Singapore
Malaysia	Spain	Japan	Norway	Thailand
Netherlands	Sweden	Malaysia	Singapore	Turkey
New Zealand	Switzerland	Netherlands	South Africa	UK
Norway	UK	New Zealand	Spain	US
Singapore	US	Norway	Sweden	Luxembourg
South Africa	Canada	Singapore	Thailand	
Spain	Belgium	South Africa	UK	
Sweden	Luxembourg	Spain	US	
Switzerland		Sweden	Canada	
UK		Switzerland	Luxembourg	
US		Thailand		
Canada		UK		
Belgium		US		
Luxembourg		Canada		
		Belgium		
		Luxembourg		

Note: Table includes only those countries for which CPIS data on countries equity investment in Australia and Australia's equity investment in these countries is available.

Appendix B: Number of Firms in respective countries for calculation of free float market capitalisation

Countries	Number of firms	Countries	Number of firms
Australia	1483	Hungary	33
Austria	94	Greece	303
Brazil	330	Zimbabwe	21
France	874	South Africa	363
Canada	1441	Morocco	31
Czech Republic	25	Mauritius	7
Denmark	172	Kenya	11
Finland	146	UK	1840
Chile	198	US	1130
Israel	549	New Zealand	132
Thailand	353	Belgium	208
Singapore	667	Bulgaria	4
Philippines	198	Croatia	4
Malaysia	596	Cyprus	25
South Korea	1001	Germany	451
Japan	3830	Pakistan	32
Indonesia	228	Sri Lanka	50
India	706	Taiwan	1175
Hong Kong	1057	Egypt	46
China	1152	Argentina	49
Bangladesh	5	Colombia	14
Turkey	162	Ecuador	2
Switzerland	378	Mexico	122
Sweden	330	Venezuela	10
Spain	158	Peru	82
Russia	148	Estonia	15
Romania	51	Slovak Republic	5
Portugal	72	Malta	14
Poland	189	Slovenia	7
Norway	177	Iceland	7
Netherlands	146		
Luxembourg	36		
Lithuania	41		
Italy	289		
Ireland	56		

Note: Data on the number of firms is per year. Data on number of firms for Czech Republic, Bangladesh, Mauritius and Iceland correspond to market capitalization as float adjusted market capitalization is not available for these countries.

Table 1: Australia's portfolio equity investment (2004)

Country	(1) Actual share in Australia's equity portfolio	(2) Benchmark share in world float market capitalisation	(3) Actual over Benchmark	(4) $HomeBias_{FF,ij}$
Austria	0.026	0.147	0.176	0.824
Canada	0.354	2.462	0.143	0.857
Czech Republic	0.001	0.035	0.030	0.970
Denmark	0.061	0.373	0.164	0.836
Finland	0.065	0.631	0.103	0.897
Germany	0.525	2.444	0.215	0.785
Hong Kong	0.288	2.612	0.110	0.890
Japan	1.661	11.719	0.141	0.859
Korea	0.184	0.817	0.226	0.774
Luxembourg	0.005	0.151	0.033	0.967
Malaysia	0.023	0.322	0.073	0.927
Netherlands	1.227	1.834	0.669	0.331
New Zealand	0.058	0.095	0.609	0.391
Norway	0.054	0.198	0.272	0.728
Singapore	0.122	0.765	0.160	0.840
South Africa	0.035	0.863	0.041	0.959
Spain	0.193	2.721	0.071	0.929
Sweden	0.139	1.122	0.123	0.877
Thailand	0.025	0.254	0.098	0.902
UK	1.746	4.573	0.381	0.619
US	11.076	32.836	0.337	0.663

Source: Foreign equity investments from the IMF's CPIS, market capitalizations from FIBV. (Author's own calculation).

Table 2: Correlation Matrix (2001 to 2005)

	$HBIAS_{FF,ij}$	$Trade_{ij}$	DIS_{ij}	Lan_{ij}	TC_j	RR_{ij}	COV_{ij}
$HBIAS_{FF,ij}$		-0.20	0.14	-0.35	0.21	-0.10	0.01
$Trade_{ij}$			-0.89	0.34	0.20	-0.36	0.20
DIS_{ij}				-0.29	-0.23	0.38	-0.37
Lan_{ij}					-0.03	0.04	-0.01
TC_j						-0.15	0.54
RR_{ij}							-0.24
COV_{ij}							

Note: *,** and *** indicate significance at the 1%, 5% and 10% levels, respectively. White corrected t-statistics in parenthesis. $HBIAS_{FF,ij}$: Float adjusted home bias measure, CC_j: Capital control measure of destination country, TC_j: Transaction cost associated with share trading in destination country, DIS_{ij}: Distance in kilometre between capital city of source country and host country, Lan_{ij}: Common language dummy with value equal to one if source and host country have same language otherwise the value is zero, $Trade_{ij}$: Trade is the average of imports and exports normalised by the destination country's GDP, RR_{ij}: Reward to risk is the ratio of destination country's mean monthly return to standard deviation, COV_{ij}: Covariance of monthly returns between source country and destination country.

Table 3: Australia's Home Bias (2001 to 2005)

	(1)	(2)	(3)
$Trade_{ij}$	-0.01**	-0.01***	
	(-2.43)	(-1.68)	
Dis_{ij}			0.14***
			(1.65)
Lan_{ij}		-0.07*	
		(-2.65)	
TC_j	0.00*	0.00*	0.00*
	(3.52)	(3.33)	(2.90)
Constant	0.68*	0.72*	0.08
	(15.62)	(15.67)	(0.23)
Adjusted R^2	0.12	0.17	0.07
Observation	108	108	108

Note: Refer note of Table 2.

Table 4: Effect of diversification on Australia's Home Bias (2001 to 2005)

	(1)	(2)	(3)	(4)
$Trade_{ij}$	-0.01**	-0.02*	-0.01***	-0.01**
	(-2.50)	(-2.93)	(-1.71)	(-2.03)
Lan_{ij}			-0.07**	-0.07**
			(-2.54)	(-2.36)
TC_j	0.00**	0.00*	0.00*	0.00*
	(2.51)	(3.32)	(2.87)	(3.22)
RR_{ij}		-0.25**		-0.18***
		(-2.26)		(-1.69)
COV_{ij}	0.00		0.00	
	(0.79)		(0.33)	
Constant	0.67*	0.72*	0.71*	0.74*
	(15.15)	(16.32)	(14.59)	(17.07)
Adjusted R^2	0.13	0.14	0.17	0.18
Observation	108	108	108	108

Note: Refer note of Table 2.

Table 5: Effect of Legal Indices on Home Bias (2001 to 2005)

	(1)	(2)	(3)
ROL	-0.02*		
	(-4.31)		
EFF		-0.02*	
		(-2.63)	
LO			-0.06**
			(-2.08)
Constant	1.03*	0.99*	0.83*
	(22.02)	(14.85)	(45.69)
Adjusted R^2	0.08	0.05	0.03
Observation	98	98	108

Note: *,** and *** indicate significance at the 1%, 5% and 10% levels, respectively. White corrected t-statistics in parenthesis. ROL: Rule of law. EFF : Efficiency of judicial system. LO: Legal Origin. Legal Indices are from La Porta et al (1998).

Table 6: Effect of Governance Indices on Home Bias (2001 to 2005)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
$Trade_{ij}$	-0.02*	-0.01***	-0.01***	-0.01**	-0.01**	-0.01**	-0.01**
	(-3.81)	(-1.87)	(-1.94)	(-2.09)	(-2.19)	(-2.05)	(-2.51)
VACC	-0.10*						
	(-3.15)						
PS		-0.04***					
		(-1.74)					
GE			-0.10*				
			(-4.36)				
RQ				-0.11*			
				(-3.75)			
RL					-0.09*		
					(-4.94)		
CC						-0.07*	
						(-4.81)	
AVE							-0.10*
							(-4.66)
Constant	0.94*	0.85*	0.97*	0.96*	0.94*	0.92*	0.95*
	(23.30)	(33.77)	(31.28)	(26.59)	(40.38)	(45.81)	(36.48)
Adjusted R^2	0.16	0.06	0.18	0.17	0.17	0.17	0.09
Observation	108	108	108	108	108	108	108

Note: *,** and **** indicate significance at the 1%, 5% and 10% levels, respectively. White corrected t-statistics in parenthesis. $Trade_{ij}$: Trade is the average of imports and exports normalised by the destination country's GDP. Voice and Accountability $(VACC)$, Political Stability and Lack of Violence (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), Control of Corruption (CC), Average (AVE) are governance Indices are from Kaufmann et al (2006).